

Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) In a decoder, a [A] method of concealing spatial errors in a coded image comprised of a stream of macroblocks, comprising the steps of:
examining each macroblock for pixel data errors, and if such errors exist, and then:
establishing for the block with pixel data errors at least one intra-prediction mode from neighboring blocks, and then
deriving estimated pixel data in the block with pixel data errors in accordance with the at least one established intra prediction mode to correct the pixel data errors.
2. (Original) The method according to claim 1 wherein the coded imaged is coded in accordance with a predetermined coding standard and wherein the intra prediction mode is specified by the predetermined coding standard.
3. (Original) The method according to claim 2 wherein the coded imaged is coded in accordance with the ISO/ITU H.264 coding standard and wherein the intra prediction mode is specified by the ISO/ITU H.264 coding standard.
4. (Currently amended) The method according to claim 1 wherein the establishing of at least one intra-prediction mode is limited to information within a rectangular array of blocks centered about the block having missing pixel data errors.
5. (Currently amended) The method according to claim 3 wherein the at least one intra prediction mode for the block with pixel data errors is established in accordance with a relative position of intra prediction modes of macroblocks neighboring the macroblock with pixel data errors.

6. (Currently amended) In a decoder, a [A] method of concealing spatial errors in a coded image comprised of a stream of macroblocks coded in accordance with the ISO/ITU H.264 Standard, the method comprising the steps of:

examining each macroblock for pixel data errors, and if so such errors exist for a block in a macroblock, where the block may or may not be the macroblock itself, then:

deriving at least one intra-prediction mode for the block with pixel data errors from neighboring blocks, the mode specified by the ISO/ITU H.264 standard; and

applying at least one interpolation filter corresponding the at least one derived intra prediction mode to estimate the pixel data in the block with pixel data errors to correct the pixel data errors in the block.

7. (Currently amended) The method according to claim 6 wherein the establishing deriving of at least one intra-prediction mode is limited to information within a rectangular array of blocks centered about the block having missing data.

8. (Currently amended) The method according to claim 7 wherein the establishing deriving of the at least one intra-prediction mode is made in accordance with a relative position of intra prediction modes of blocks neighboring the block with missing pixel data.

9.(Original) The method according to claim 6 wherein an individual macroblocks can be intra-predicted as one of a single partition of 16x16 pixels (Intra_16x16 type coding) or as partition of 16 blocks of 4x4 pixels (Intra_4x4 type coding).

10. (Original) The method according to claim 9 wherein for the Intra_16x16 type coding, the intra prediction modes comprise: (a) Mode 0, vertical prediction; (b) Mode 1, horizontal prediction; (c) Mode 2, DC prediction; and (d) Mode 3, plane prediction.

11.(Original) The method according to claim 9 wherein for the Intra_4x4 coding type, the prediction modes each one having associated an interpolation filter to derive a prediction for each pixel within a block.

12.(Original) The method according to claim 9 wherein the prediction modes comprise: (a) Mode 0, vertical prediction; (b) Mode 1, horizontal prediction; (c) Mode 2, DC prediction; (d) Mode 3, diagonal down-left prediction; (e) Mode 4, diagonal down-right prediction; (f) Mode 5, vertical right prediction; (g) Mode 6, horizontal down prediction; (h) Mode 7, vertical left prediction; and (i) Mode 8, horizontal up prediction.

13. (New) The method according to claim 1, wherein the direction defined by the intra-prediction mode is sent in the coded stream.

14. (New) The method according to claim 5, wherein the relative position associated with the intra-prediction mode is the relative position in a spatial direction associated with the direction defined by the intra-prediction mode.

15. (New) The method according to claim 8, wherein the relative position associated with the intra-prediction mode is the relative position in a spatial direction associated with the direction defined by the intra-prediction mode.